

Title (en)

RETENTION DEVICE FOR RETAINED SUBSTANCE AND RETENTION METHOD

Title (de)

HALTEVORRICHTUNG ZUM ZURÜCKHALTEN EINER SUBSTANZ UND HALTEVERFAHREN

Title (fr)

DISPOSITIF DE RÉTENTION POUR SUBSTANCE DESTINÉE À ÊTRE RETENUE ET PROCÉDÉ DE RÉTENTION

Publication

**EP 2695671 A4 20141231 (EN)**

Application

**EP 12763902 A 20120326**

Priority

- JP 2011076149 A 20110330
- JP 2012057686 W 20120326

Abstract (en)

[origin: EP2695671A1] A carbon dioxide tank (3) is connected to a pump device (5). The pump device (5) is joined and connected with an infusion well (9), which is a tubular body. The infusion well (9) extends downward beneath the ground (7) and is provided so as to reach a saltwater aquifer (11). Part of the infusion well (9) forms a horizontal well (10) in a substantially horizontal direction. In other words, the horizontal well (10) is a location in which part of the infusion well (9) is formed in a substantially horizontal direction within a saltwater aquifer (11). The horizontal well (10) is provided with filters (13), which are porous members. For the filters (13), for example, a fired member in which ceramic particles are mixed with a binder that binds those particles can be used. Moreover, if the hole diameter for the filters (13) is small, microbubbles with a smaller diameter can be generated.

IPC 8 full level

**B01J 19/00** (2006.01); **C01B 32/50** (2017.01)

CPC (source: EP KR US)

**B01J 19/00** (2013.01 - KR); **B65G 5/00** (2013.01 - US); **C01B 32/50** (2017.07 - EP KR US); **E21B 41/0064** (2013.01 - EP US);  
**Y02C 20/40** (2020.08 - EP US)

Citation (search report)

- [Y] CA 2768437 A1 20110217 - TOKYO GAS CO LTD [JP]
- [Y] US 2009062593 A1 20090305 - BRUNO MICHAEL S [US], et al
- [A] WO 2011032019 A2 20110317 - C12 ENERGY INC [US], et al
- See references of WO 2012133265A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

**EP 2695671 A1 20140212; EP 2695671 A4 20141231; EP 2695671 B1 20160518;** AU 2012233997 A1 20131024; AU 2012233997 B2 20140403;  
CA 2831026 A1 20121004; CA 2831026 C 20160823; CN 103442798 A 20131211; CN 103442798 B 20150107; JP 2012206103 A 20121025;  
JP 5399436 B2 20140129; KR 101382753 B1 20140408; KR 20130127539 A 20131122; US 2014072369 A1 20140313;  
US 8998532 B2 20150407; WO 2012133265 A1 20121004

DOCDB simple family (application)

**EP 12763902 A 20120326;** AU 2012233997 A 20120326; CA 2831026 A 20120326; CN 201280015040 A 20120326; JP 2011076149 A 20110330;  
JP 2012057686 W 20120326; KR 20137027050 A 20120326; US 201214008779 A 20120326